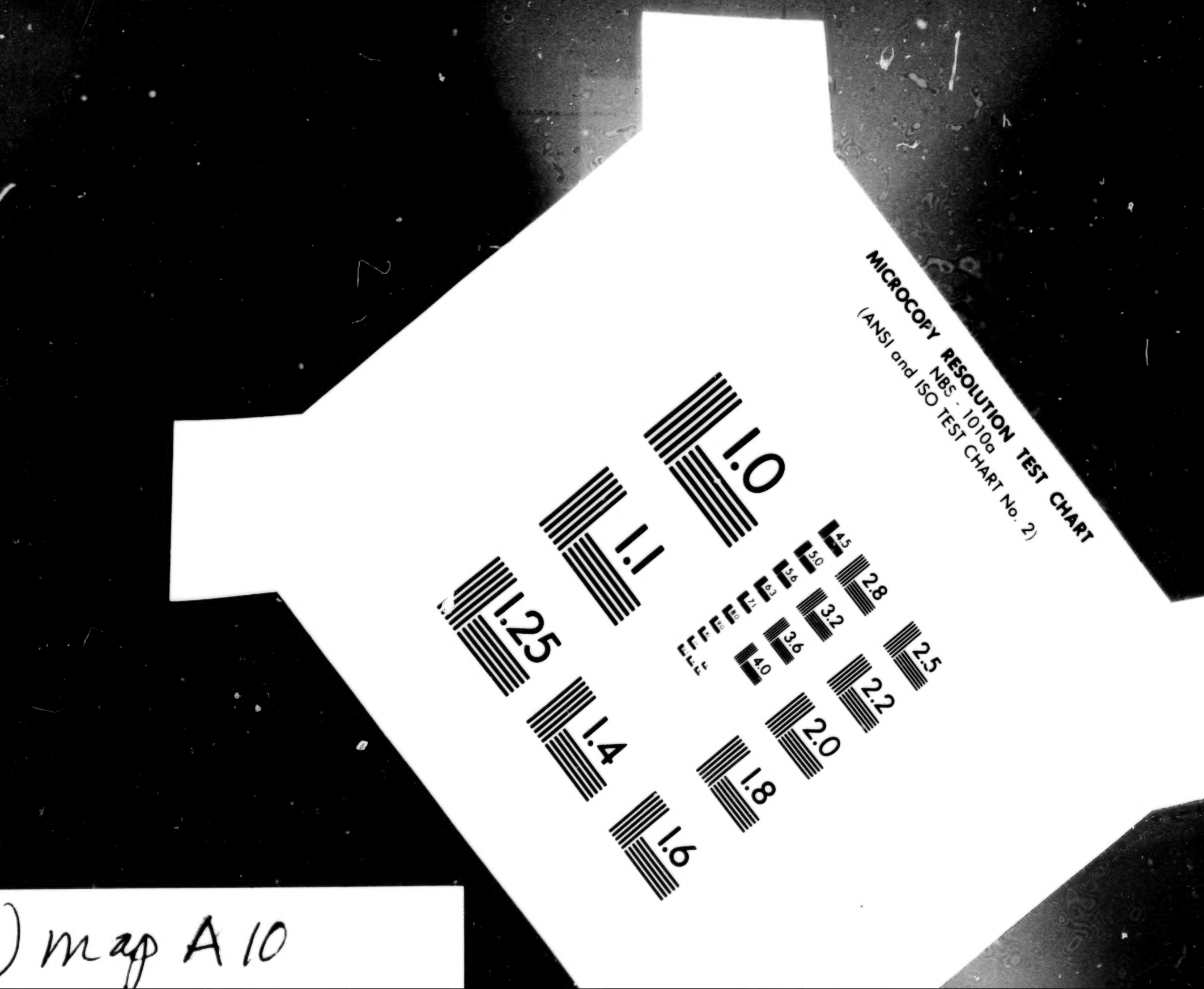
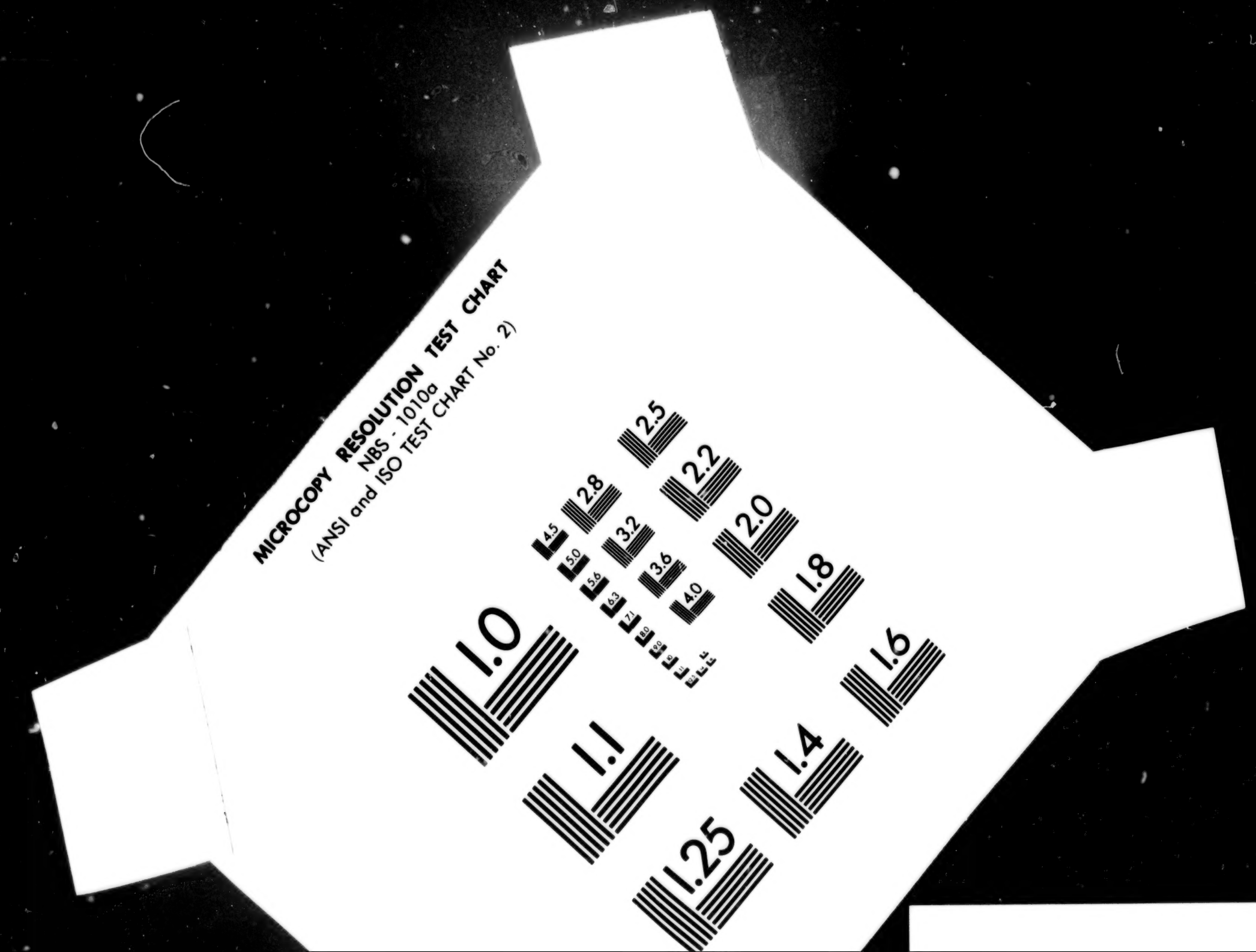




I 49.89/2:85 (15) map A 10

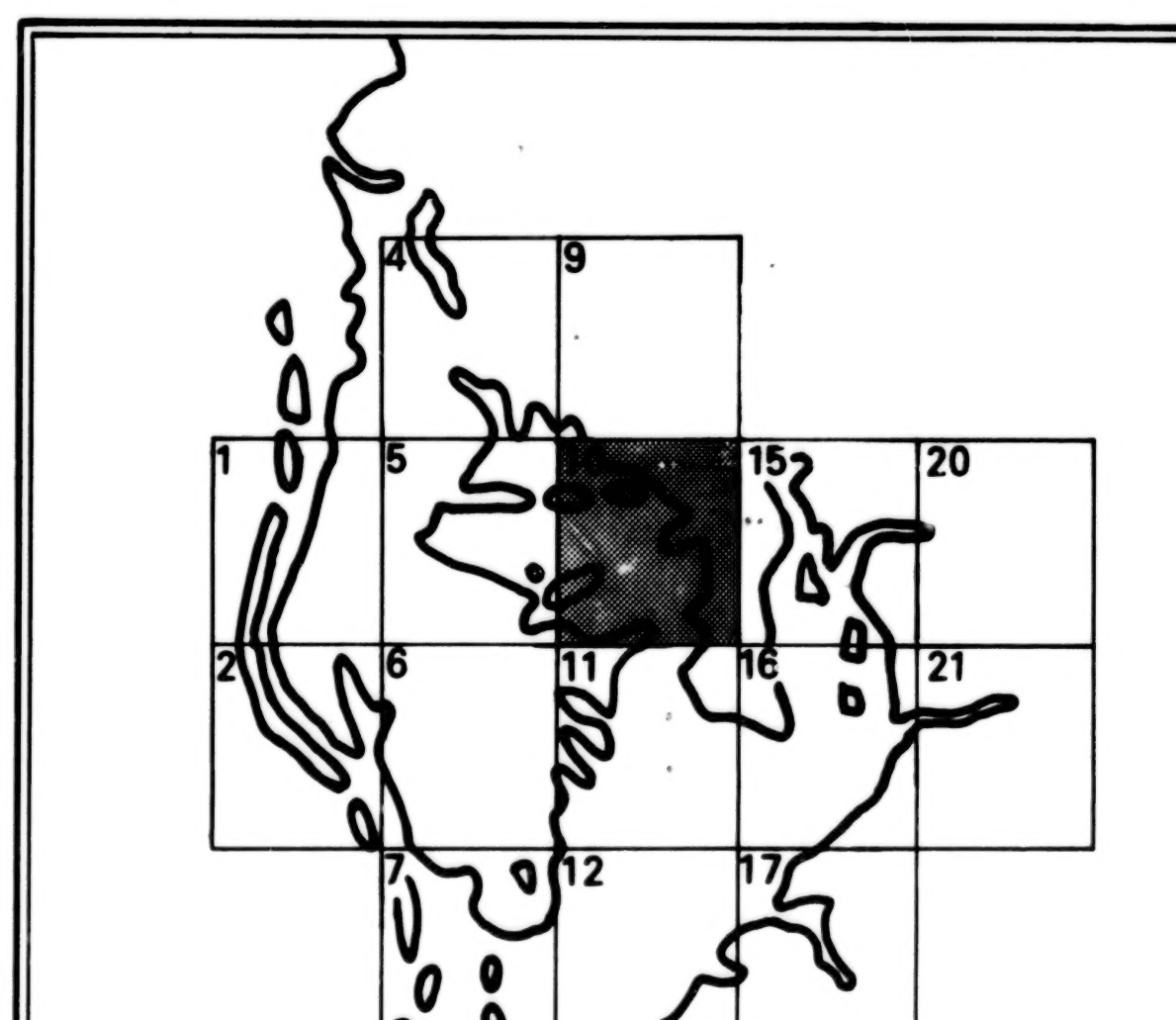
This is a detailed street map of a portion of St. Louis, Missouri. The map features a grid of streets and highways. At the top, there are labels for "Under Sch" and "Lois Ave Sch". A major horizontal road is labeled "B.D.Y." and "AVE.". Below this, another horizontal road is labeled "CREST". To the right, a vertical road is labeled "HUBERT AVE". Other streets shown include "OSBORNE AVE", "CAUYGA ST", "BUFFALO ST", "LOIS AVE", and "AL LACE FIELD". A large black diamond shape is located near the bottom center, labeled "Al Lacey Field". A prominent feature is a large black rectangle labeled "J. Edgar Hoover High School". The map also includes a grid system with numbers such as 31, 29, 4, 3, 574, and 580. In the bottom left corner, there is a small inset map showing the location of the main area within the city of St. Louis.

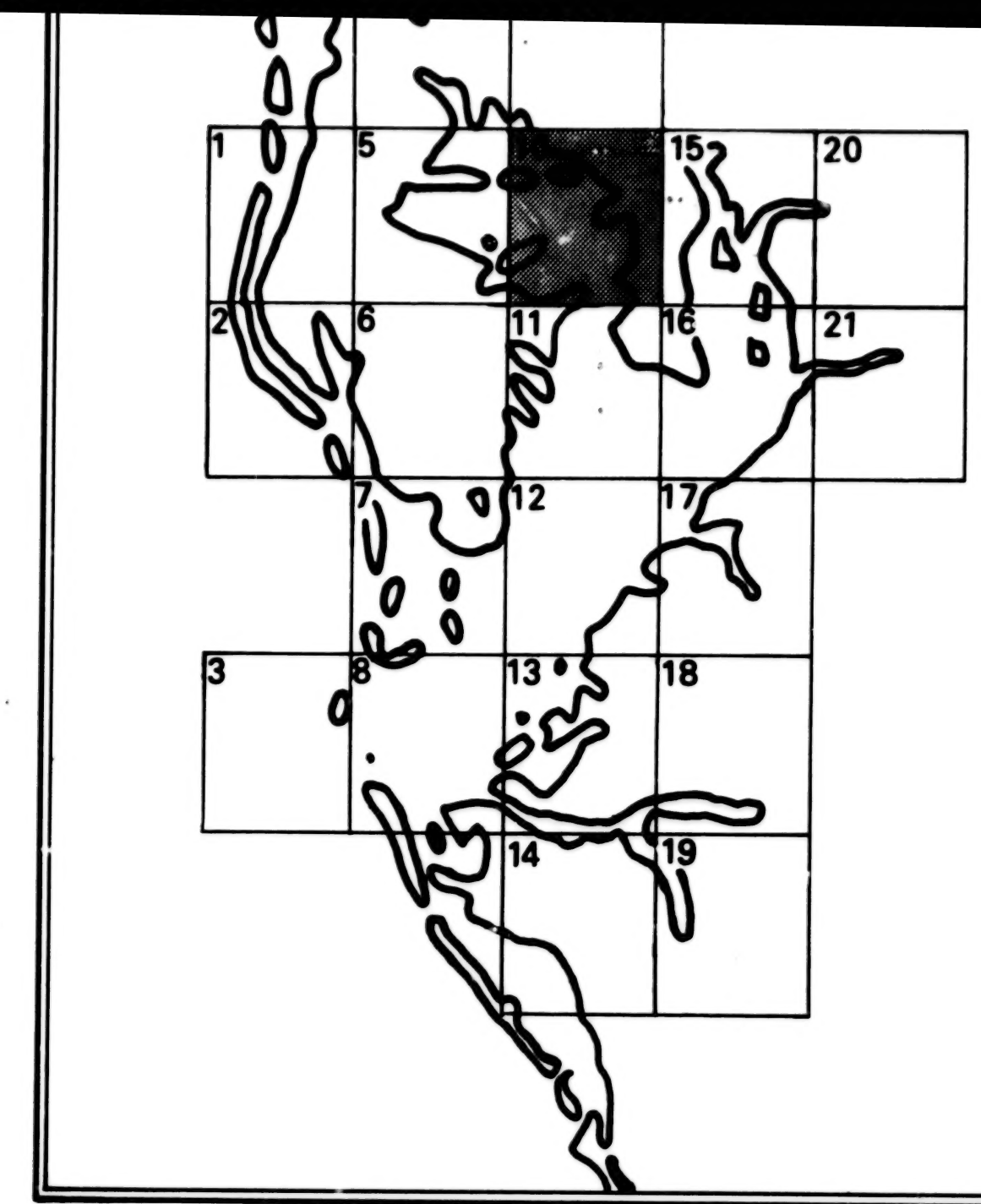
TAMPA BAY ENVIRONMENTAL ACTION BIOLOGICAL RESOURCE GANDY BRIDGE

BIOLOGICAL RESOURCES

GANDY BRIDGE

A map of the Gandy Bridge area in Tampa, Florida, overlaid with a grid. The grid consists of 21 numbered squares. A shaded area, representing biological resources, is located in the center of the grid, covering squares 11, 12, 13, 14, 15, and 16. The map shows the coastline of Tampa Bay and the Gandy Bridge crossing the water.





Scale 1:24,000



1984



TOPICAL MAPS IN THIS ATLAS:
A. BIOLOGICAL RESOURCES
B. WATER RESOURCES

Produced by U.S. Fish and Wildlife Service
Projection and 1,000 meter grid, zone 17: Universal
Transverse Mercator
10,000-foot grid ticks based on Florida coordinate
system, east and west zones



Transverse Mercator
10,000-foot grid ticks based on Florida coordinate
system, east and west zones

Overlay material compiled in 1984 from
latest available data obtained from
Federal, State and Local government
agencies and other sources.

There are no maps A19, A20, A21 due to a lack of data.

LEGEND

SHELLFISH HARVEST AREA (Florida Dept. of Natural Resources)

SHA Shellfish Harvest Approved

SHCA Shellfish Harvest Conditionally Approved

NOTE: Due to Dept. of Natural Resources (DNR) water quality
standards all other estuarine areas are prohibited or
unclassified as to shellfish harvest status and are
officially unapproved. For further info. on status of
harvest areas contact DNR - Shellfish Environmental
Assessment Section.

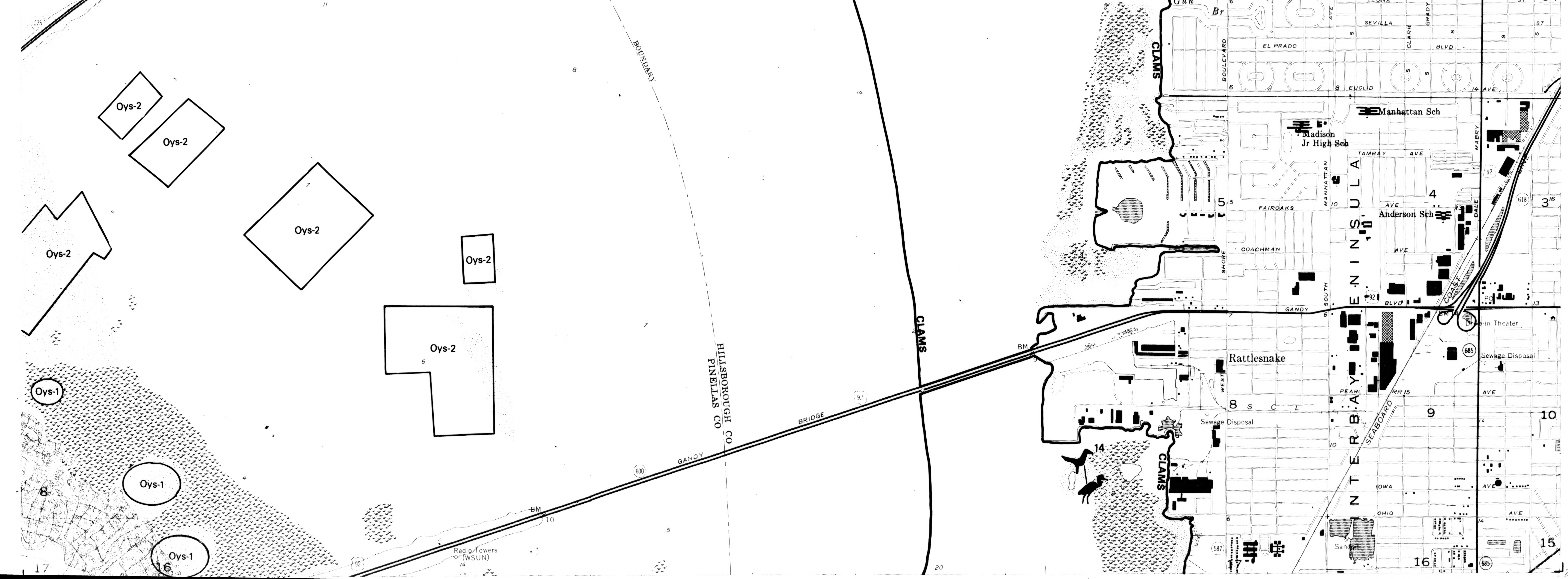
Oys-1 Public Oyster Bed

Oys-2 Private Oyster Bed (Lease)

CLAMS Clam Bed

FINFISH SPAWNING, NURSERY AND HARVEST AREAS (Recreational Hook and Line Fishing)

SPECIES #	FINFISH CATEGORY Common Name	SPAWNING		MAJOR NURSERY HABITATS		MAJOR ADULT HABITATS		MIGRATION TYPE
		LOCATION	SEASON	MAJOR NURSERY HABITATS	MAJOR ADULT HABITATS	MAJOR ADULT HABITATS	MAJOR ADULT HABITATS	
1	Red Drum	C	J M J S N	Seagrass	Artificial Reef	Open Water	Artificial Reef	2
2	Spotted Seatrout	E	J M J S N	Seagrass	Artificial Reef	Open Water	Artificial Reef	2



SPECIES #	FINFISH CATEGORY Common Name	SPAWNING		NURSERY AREA	MAJOR NURSERY HABITATS						AREA OF ADULT ABUNDANCE	MAJOR ADULT HABITATS						
		LOCATION	SEASON		Seagrass	Mangrove	Saltmarsh	Beach	Coral Reef	Artificial Reef		Open Water	Seagrass	Mangrove	Beach	Coral Reef	Artificial Reef	Open Water
		M	M	M	S	N												
COMPLETION PERCENTAGE FLAG																		

ESTUARINE DEPENDENT FISHES

1	Red Drum	C																	2
2	Spotted Seatrout	E																	2
3	Snook	C																	2
4	Sheepshead	C																	1
5	Southern Flounder	C																	2
6	Florida Pompano	CS																	3
7	Striped Mullet	CS																	3
8	Gulf Menhaden	C																	3
9	Spanish Sardine	C																	3
10	Black Drum	C																	1

REEF FISHES

11	Red Grouper	CS																	2
12	Jewfish	CS																	2
13	Gag Grouper	CS																	2
14	Scamp	CS																	2
15	Red Snapper	CS																	2
16	Mangrove Snapper	CS																	2

COASTAL PELAGIC FISHES

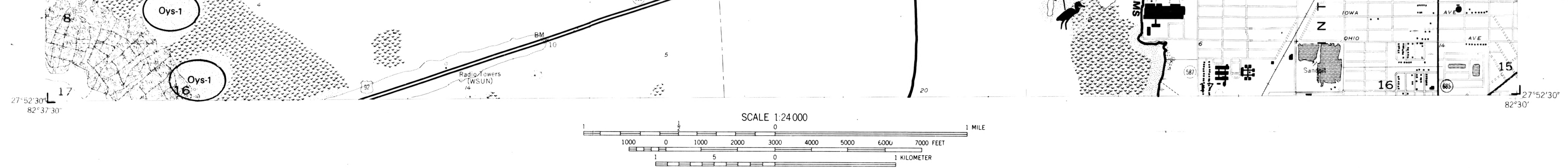
17	King Mackerel	OCS																	4
18	Spanish Mackerel	CS																	4

*KEY:
E - Estuarine
C - Coastal
CS - Continental Shelf
OCS - Outer Continental Shelf

*MIGRATION TYPE:
1 - Residentially Restricted
2 - Random Residential Range
3 - Restricted Migration
4 - Extensive Migration

COLONIAL BIRD NESTING SITE *
Number appearing with symbol indicates colony sites. Colony sites and species composition data are included in the narrative.

Shorebird
Wading Bird
Brown Pelican



THE TAMPA BAY ENVIRONMENTAL ATLAS WAS PRODUCED BY THE U.S. FISH AND WILDLIFE SERVICE, DIVISION OF BIOLOGICAL SERVICES NATIONAL COASTAL ECOSYSTEMS TEAM (FWS/OBS) FOR COASTAL PLANNERS, DECISION MAKERS AND THE GENERAL PUBLIC, TO DETERMINE AND EVALUATE CHANGE AND TO RESOLVE CONFLICTS AMONG LAND USES, FISH AND WILDLIFE REQUIREMENTS AND THE MAINTENANCE OF ECOLOGICAL DIVERSITY. THE STUDY AREA INCLUDES A MAJOR PORTION OF THE COASTAL COUNTIES OF PINELLAS, HILLSBOROUGH, MANATEE, AND A SMALL PORTION OF SARASOTA. THERE IS NO ATTEMPT, IN THE DESIGN OR PRODUCTS OF THIS STUDY, TO DEFINE THE LIMITS OF PROPRIETARY JURISDICTION OF ANY FEDERAL, STATE, OR LOCAL GOVERNMENT TO ESTABLISH THE GEOGRAPHICAL SCOPE OF THE REGULATORY PROGRAMS OF GOVERNMENT AGENCIES.

THIS MAP HAS BEEN COMPILED FROM A VARIETY OF SOURCE MATERIALS INCLUDING MAPS, AERIAL PHOTOS, AND REPORTS. SINCE MANY SOURCES CONTAINED GENERALIZED LOCATIONS OF RESOURCES AND OTHER MAPPED FEATURES, THE USER SHOULD NOT RELY ON THESE MAPS FOR PRECISE MEASUREMENTS OF DISTANCES OR AREAS.

PRIMARY SOURCES OF MAPPED INFORMATION:

SHELLFISH HARVEST AREAS: Shellfish Harvest Area Maps, Dept. of Natural Resources, 1982.

PUBLIC & PRIVATE OYSTER BEDS: Cooperative Gulf of Mexico Estuarine Inventory and Study, Florida, McNulty, Lindell and Sykes, 1972.

CLAMS: Personal Communication, Discussion of Distribution Clams in Tampa Bay and Adjacent Brackish Waters, Mr. L. Tracy Three T's Clam Company, 1983. Mike Sprague, Draft Maps, Department of Natural Resources, 1984.

SCALLOP BEDS: Personal Communication, Mr. Bill Lyons Dept. of Natural Resources, Marine Research Laboratory, 1982.

FINFISH SPAWNING, NURSERY & HARVEST AREAS: Florida's Fishing Grounds, Moe, 1970.

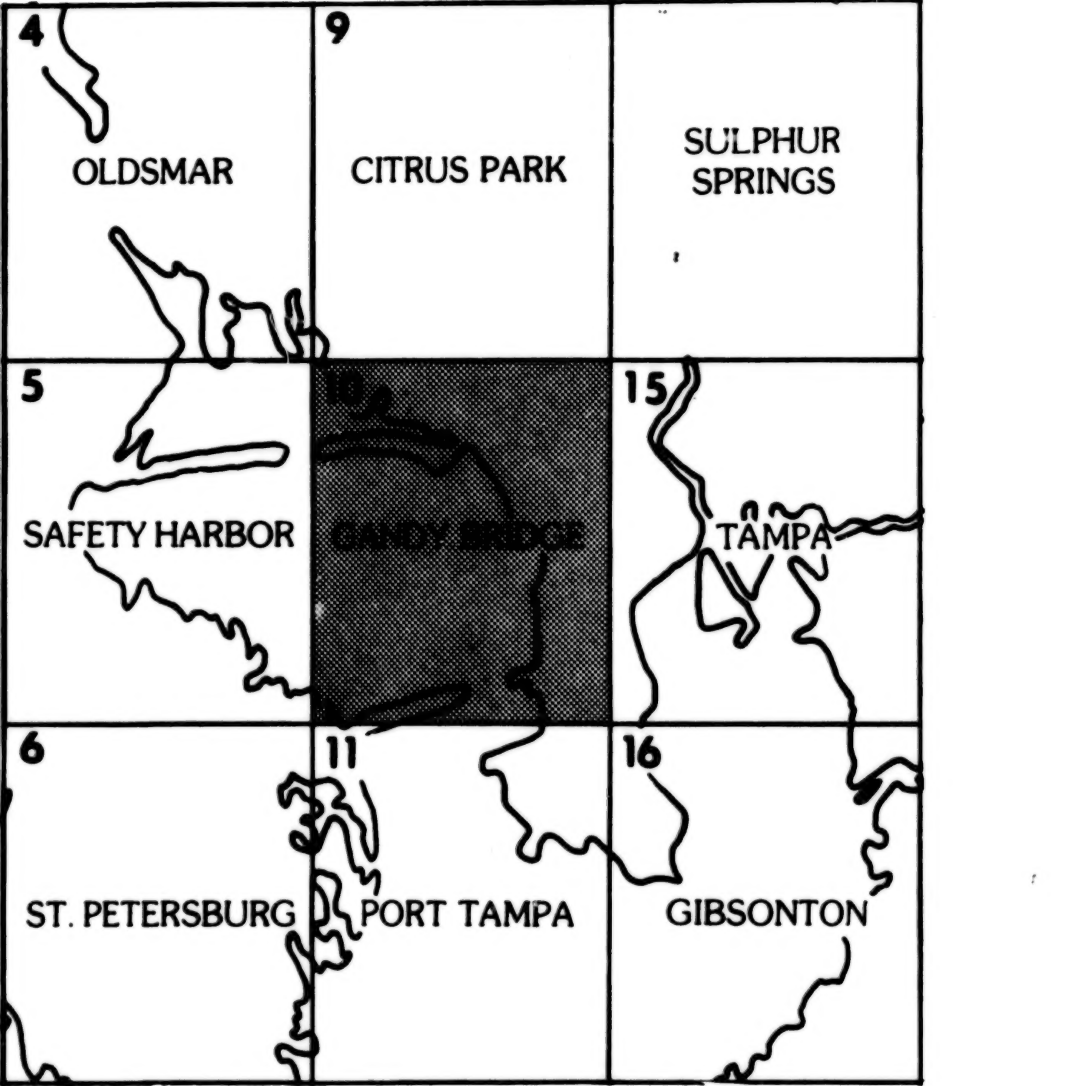
BIRD NESTING SITES: Florida Atlas of Breeding Sites for Herons and Their Allies, 1976-78, Neabitt, S.A., Ogden, J.C. Kale II, H.W., et al. U.S. Fish and Wildlife Service, 1982. Personal Communication, Maps and Data, Dr. H.W. Kale II, Florida Audubon Society, 1982.

MANATEE HABITAT: Boaters guide to Manatees, the gentle giants, Florida Marine Patrol, 1980.

SEAGRASS BEDS: Tampa Bay Seagrass Maps, 1:10,000 and 1:24,000 Scales, Mangrove Systems, Inc. 1980. National Wetlands Inventory Maps, 1:24,000 Scale, U.S. Fish and Wildlife Service, 1983.

ARTIFICIAL REEFS: Computer Printout of Florida Artificial Reefs, U.S. Army Corps of Engineers, 1981. Recreational Use Reefs in Florida, Artificial and Natural, Florida Sea Grant Program, 1978.

FOR COMPLETE REFERENCE SEE MAP NARRATIVE



- Shorebird
- Wading Bird
- Brown Pelican
- WEST INDIAN MANATEE HABITAT
- STATE MANATEE SANCTUARY
- SEAGRASS BEDS
- ARTIFICIAL REEF*
(Permitted by Florida Dept. of Environmental Regulation)

*Symbols appearing with numbers are described more fully in the narrative.

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